

## CLAIMS

1. A bioassay plate comprising a first substrate and a second substrate stacked together,

said first substrate being provided at least with a reaction region for providing a place of an interaction between substances in a liquid phase and also with a first electrode arranged to face said reaction region, and

said second substrate being provided at least with a second electrode formed to be located oppose said first electrode.

2. The bioassay plate according to claim 1, wherein an axis of opposition between said first electrode and said second electrode is perpendicular to a bottom wall of said reaction region.

3. The bioassay plate according to claim 1, wherein a light source is arranged at a position of said first electrode, and a light-receiving portion is arranged at a position of said second electrode.

4. The bioassay plate according to claim 1, wherein a light-receiving portion is arranged at a position of said first electrode, and a light source is arranged at a position of said second electrode.

5. A method for producing a bioassay plate, which comprises providing:

a first substrate having a detecting portion provided at least with a reaction region for providing a place of an interaction between substances and also with a first electrode arranged to face said reaction region, and

a second substrate provided at least with a second electrode which permits imposition of an electric field to said reaction region in association with said first electrode; and

stacking these two substrates together such that said first electrode and said second electrode are located opposite each other.

6. The method according to claim 5, wherein a first substrate as defined in claim 5 and a second substrate as defined in claim 5 are stacked together, said first substrate carries thereon an array of plural detecting portions as defined in claim 5; and said second substrate is provided with a common second electrode for establishing a relation of opposing electrodes with first electrodes as defined in claim 5 and arranged in said respective plural detecting portions as a unit.

7. The method according to claim 5, wherein disk-shaped, said first substrate as defined in claim 5 and said second substrate as defined in claim 5 are stacked together, said first substrate carries thereon plural

detecting portions as defined in claim 5 and arranged in a form of radial arrays from a center of said substrate, and said second substrate is provided with a strip-shaped or line-shaped, common second electrode as defined in claim 5 and formed extending over some or all of said detecting portions belonging to one of said radial arrays.

8. The method according to claim 5, wherein disk-shaped, said first substrate as defined in claim 5 and said second substrate as defined in claim 5 are stacked together, said first substrate carries thereon plural detecting portions as defined in claim 5 and arranged in a form of concentric arrays, and said second substrate is provided with a strip-shaped or line-shaped, common second electrode as defined in claim 5 and formed extending over some or all of said detecting portions belonging to one of said concentric arrays.

9. The method according to claim 5, wherein disk-shaped, said first substrate as defined in claim 5 and said second substrate as defined in claim 5 are stacked together, said first substrate carries thereon plural detecting portions as defined in claim 5 and arranged in a form of a spiral array, and said second substrate is provided with a strip-shaped or line-shaped, common second electrode as defined in claim 5 and formed extending over some or all of said detecting portions

belonging to one of spiral array.

10. The method according to claim 5, wherein an axis of opposition between said first electrode and said second electrode is perpendicular to a bottom wall of said reaction region.